



**SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION**

Coating, Printing, Aerospace & Metal Finishing Team

PERMIT APPLICATION EVALUATION

Page 1 of 7
A/Ns See description
Processed by WWilson
Reviewed by SEbiner
Date 6/9/09

**PERMIT TO CONSTRUCT/OPERATE
Aerosol Can Recycling System**

Applicant's Name: *AMF Anaheim LLC*
Facility ID: 149235
Mailing Address: 2100 E. Orangewood Ave, Anaheim, CA 92806
Equipment Address: 2100 E. Orangewood Ave, Anaheim, CA 92806

EQUIPMENT DESCRIPTION

A/N 492530

Title V permit revision – Minor Permit Revision

A/N 492529 (New Construction- PC/PO)

AEROSOL CAN RECYCLING SYSTEM CONSISTING OF:

1. *55 GALLON (MAXIMUM) RECEIVING DRUM.*
2. *AEROSOL CAN HOUSING SLEEVE AND PUNCTURE UNIT, AEROSOLV, MODEL NO. 7000.*
3. *CARBON FILTER UNIT, AEROSOLV, MODEL NO. 28228, WITH COALESCING FILTER AND 1.25 LBS ACTIVATED CARBON.*

Conditions

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
3. THE CARBON FILTER UNIT SHALL BE REPLACED AFTER PUNCTURING 1000 CANS IN THE DRUM OR WITHIN 45 DAYS AFTER FILTER INSTALLATION ON THE DRUM, WHICH EVER IS SOONER.



**SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT
ENGINEERING AND COMPLIANCE DIVISION**

Coating, Printing, Aerospace & Metal Finishing Team

PERMIT APPLICATION EVALUATION

Page	2 of 7
A/Ns	See description
Processed by	WWilson
Reviewed by	SEbiner
Date	6/9/09

4. THIS EQUIPMENT SHALL ONLY BE USED TO PROCESS SPENT AEROSOL PAINT CANS THAT WERE USED AT THIS FACILITY.
5. THE AEROSOL PAINT CAN SHALL BE LEFT IN THE CAN HOUSING SLEEVE FOR AT LEAST 30 SECONDS AFTER IT IS PUNCTURED FOR COMPLETE DEPLETION OF SOLVENT INSIDE THE CAN.
6. THE RECEIVING DRUM SHALL BE REPLACED WITH A NEW DRUM AFTER NO MORE THAN 4,200 CANS ARE PUNCTURED IN THIS EQUIPMENT. THE LIQUID WASTE COLLECTED INSIDE THE DRUM SHALL BE DISPOSED OF AS HAZARDOUS WASTE.
7. THE TOTAL QUANTITY OF VOLATILE ORGANIC COMPOUND (VOC) EMISSIONS DISCHARGED TO THE ATMOSPHERE FROM THIS FACILITY SHALL NOT EXCEED 372 POUNDS IN ANY ONE DAY. (FACILITY CONDITION)
8. THE LAST CAN PUNCTURED WITHIN THE AEROSOL CAN HOUSING SHALL BE LEFT IN THE CAN HOUSING SLEEVE UNTIL PUNCTURING IS RESUMED FOR ANOTHER BATCH OF AEROSOL CANS.
9. IN ADDITION TO THE RECORDKEEPING REQUIREMENTS OF RULE 109, THE OPERATOR SHALL KEEP ADEQUATE RECORDS FOR THE EQUIPMENT AND FACILITY TO VERIFY THE VOC CONTENT OF EACH MATERIAL AS APPLIED (INCLUDING WATER AND EXEMPT COMPOUNDS), AND THE DAILY VOC EMISSIONS IN POUNDS. ALL RECORDS SHALL BE PREPARED IN A MANNER THAT IS ACCEPTABLE TO THE DISTRICT. RECORDS SHALL BE RETAINED ON THE PREMISES FOR TWO YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR HIS REPRESENTATIVE UPON REQUEST.
10. MATERIAL SAFETY DATA SHEETS FOR ALL MATERIALS USED AT THIS FACILITY AND SUBJECT TO DISTRICT RULES SHALL BE KEPT CURRENT AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.

BACKGROUND

AMF Anaheim LLC submitted the above applications on 11/07/08 for a permit to construct and operate a new aerosol can recycling system. The applicant uses a significant number of aerosol cans at this location in their manufacturing process. The disposal of these cans as hazardous waste is very expensive because of the big volume. However, by using the above described equipment the liquid hazardous waste from the used cans will be collected in a drum

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION <i>Coating, Printing, Aerospace & Metal Finishing Team</i> PERMIT APPLICATION EVALUATION</p>	<p>Page 3 of 7 A/Ns See description Processed by WWilson Reviewed by SEbiner Date 6/9/09</p>
---	--

and disposed separately, which will be economical because of reduction in waste disposal volume compared to total can volume. This aerosol recycling system has a small activated carbon filter unit to control the fugitive VOC emissions.

AMF manufactures commercial electronics sheet metal chassis and panels. Rules 1107 and 1171 apply to this facility. This facility currently operates a number of equipment under a facility emission cap of 372 lb/month of VOC. This new equipment will be operated under this facility cap. Therefore this project will not require offsets and will comply with the BACT requirements.

The District database shows that the applicant has not received any odor nuisance or visible emission complaints from the public in the last two years. The company was not issued any notice of violation in the last two years. The facility is located within an industrial area. It is not located within 1000 feet from any school and there will not be any emission increase above the threshold limits, hence, this application will not require public notification per Rule 212.

AMF is a Title V facility. The first Title V permit was issued to this facility on 9/4/07 for change of operator from APW (ID# 110175), with their first revision issued 8/27/08. The Title V renewal for the previous operator AMF was issued on 7/9/06. The proposed project is considered as a "minor permit revision" to the renewed Title V permit, as described in the Regulation XXX evaluation. This is the third revision since the TV permit renewal was issued.

PROCESS DESCRIPTION

AMF manufactures commercial electronics sheet metal chassis and panels. The process involves cutting, forming, assembly and painting. In the painting of small parts and in paint repairing jobs, the operators use aerosol cans at this facility. Currently, they dispose of the used cans as a hazardous waste. However, with the above system, the hazardous solvent left in the used can will be recovered in a 55-gallon drum according to the following method.

The AEROSOLVE can housing unit threads directly to the 2" bung of a 55-gallon drum. The AEROSOLVE carbon filter unit is installed on the other side of the can housing unit. The used aerosol can is inserted (inverted) into the housing and locked in place. The handle is pushed down and held in place while the can releases initial pressure and solvent contents into the drum. About 20 seconds are required to remove the contents from a supposedly empty aerosol can. The displaced air goes through the carbon filter. The filter is composed of two parts; a coalescing lower portion and an activated carbon upper portion. The coalescing portion collects microscopic airborne liquids from the gas and combines them into droplets which collect within the filter chamber. The dry air then goes through the activated carbon portion where the gaseous VOCs are captured by adsorption. The escaping gas has 75 ppm or less VOCs. The

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION <i>Coating, Printing, Aerospace & Metal Finishing Team</i> PERMIT APPLICATION EVALUATION</p>	<p>Page 4 of 7 A/Ns See description Processed by WWilson Reviewed by SEbiner Date 6/9/09</p>
---	--

last punctured can is left in the housing until puncturing is resumed. The VOC gases in the drum on the liquid level can only go out through the filter unit. Some of these gases remain in the drum under pressure equilibrium. The filter unit shall be replaced after puncturing 1000 cans or after 45 days, whichever is sooner. The new colormetric carbon cartridge clearly indicates replacement for maximum efficiency.

EMISSION CALCULATIONS

The facility is operating under an emission cap of 372 lbs/day of VOC. There will be no VOC emission increase from the facility since the facility cap will remain the same.

Operating hours: Average: 24 hr/day, 7 days/wk, 52 wk/yr
Maximum: 24 hr/day, 7 days/wk, 52 wk/yr

Processing 4200 cans can fill a 55 gallon drum to 75% level.

So, 4200 cans can release about 42 gallons of air with VOCs (propellants)

In a day about 100 cans (max) will be punctured, which releases about 1 gallon of air with VOCs.

The puncturing of 100 cans will have 1 gallon of displaced air with 300 ppm VOCs.

V = The volume occupied by 1 lb-mol of ideal gas at standard condition = 387 ft³

Mol. Wt. of typical propellant (butane) = 44

1 gallon air = 0.134 SCF

VOC emissions lb/day (R1) = (PPM) 10⁻⁶ X MW X SCF/day (gal of air) / V

R1 = 1 gal air/day X (300 ft³ VOC/10⁶ ft³ air) X (lb mole VOC/387 ft³ VOC) X (44 lb VOC/lb mole VOC) X (0.134 ft³ air /gal air) = 4.6 X 10⁻⁶ lb VOC/day (negligible)

The VOC emissions are already accounted for in the paint usage records, so no VOC emissions will be reported for this equipment. The use of this equipment actually will reduce the VOC emissions (including any possible toxics) by the amount of liquid collected in the 55-gallon drum.

RULE EVALUATION

RULE 212(c)(1) *This section requires a public notice for all new and modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school.*

Since there are no schools within 1,000 feet of the facility, a public notice will not be required by this section.

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION <i>Coating, Printing, Aerospace & Metal Finishing Team</i> PERMIT APPLICATION EVALUATION</p>	<p>Page 5 of 7 A/Ns See description Processed by WWilson Reviewed by SEbiner Date 6/9/09</p>
---	--

RULE 212(c)(2) *This section requires a public notice for all new and modified facilities which have on-site emission increases exceeding any of the daily maximums specified in subdivision (g).*

As shown in the following table, there is no emissions increase from this facility. The new aerosol can recycling system will be operating under the facility limit of 372 lb/day and the VOC emissions are negligible. Therefore, public notice will not be required.

LB/DAY	CO	NOX	PM10	ROG	LEAD	SOX
Max Limit	220	40	30	30	3	60
Increases	0	0	0	0	0	0

RULE 212(c)(3) *This section requires a public notice for all new or modified permit units with increases in emissions of toxic air contaminants listed in Table I of Rule 1401 resulted in MICR greater than $1E^{-6}$ per permit unit or greater than $10E^{-6}$ per facility.*

There will be no emissions of TAC from this equipment. Therefore, public notice is not required.

RULE 212(g) *This section requires a public notice for all new and modified sources that have equipment emission increases exceeding any of the daily maximum as specified by Rule 212 (g).*

As shown in the following table, the emissions increase from the equipment (< 0.5 lb/day VOC) will not exceed the daily maximum limits specified by Rule 212(g). Therefore, public notice will not be required by this section.

	ROG	NO _x	PM ₁₀	SO ₂	CO	Pb
Per project	0	0	0	0	0	0
MAX MDC Limit (lb/day)	30	40	30	60	220	3
Required Public Notice	No	No	No	No	No	No

RULE 401 Visible Emissions

Visible emissions are not expected with proper maintenance and operation of this equipment. The system shows no visible emissions complaints for the facility.

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION <i>Coating, Printing, Aerospace & Metal Finishing Team</i> PERMIT APPLICATION EVALUATION</p>	<p>Page 6 of 7 A/Ns See description Processed by WWilson Reviewed by SEbiner Date 6/9/09</p>
---	--

RULE 402

Nuisance

Operation of this equipment is not expected to create odors or nuisance with proper maintenance and operation. The system shows no nuisance complaints for the facility.

REG XIII

Rule 1303(a), Best Available Control Technology (BACT)

The VOC emissions are controlled by an activated carbon adsorber unit. The VOC emissions before control are below 1 lb/day. Therefore, BACT is not triggered.

Rule 1303 (b)(1), Modeling

Modeling is not required for VOC.

Rule 1303 (c)(1), Offsets

This equipment will be operated under the existing facility VOC cap. There is no increase in VOC emissions from the facility as a result of this project, therefore offsets are not required.

RULE 1401

New Source Review of Toxic air Contaminants

VOC emissions are negligible (4.6×10^{-6} lb/day). The VOC emissions are expected to be below the screening levels of any TAC. Compliance is expected.

REG XXX

This facility is not in the RECLAIM program. The proposed project is considered as a “minor permit revision” to the Title V permit for this facility.

Rule 3000(b)(12)(vi) defines a “minor permit revision” as any Title V permit revision that does not result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air pollutant (HAP).

The proposed project is not expected to result in an increase in emissions of a pollutant subject to Regulation XIII – New Source Review (non-RECLAIM pollutants) or a hazardous air

 <p>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT ENGINEERING AND COMPLIANCE DIVISION <i>Coating, Printing, Aerospace & Metal Finishing Team</i> PERMIT APPLICATION EVALUATION</p>	<p>Page 7 of 7 A/Ns See description Processed by WWilson Reviewed by SEbiner Date 6/9/09</p>
---	--

pollutant (HAP), and therefore is considered as a “minor permit revision” pursuant to Rule 3000(b)(12)(A)(vi).

This proposed project is the 2nd permit revision to the “initial” Title V permit issued to this facility on September 4, 2007 for change of operator from APW under ID# 110175. The following table summarizes the permit revisions since the Title V permit renewal for the previous operator was issued on 7/9/06:

<i>Revision</i>	<i>HAP</i>	<i>VOC</i>	<i>NOx</i>	<i>PM₁₀</i>	<i>SOx</i>	<i>CO</i>
2 nd Revision: Add new Aerosol Can Recycling System, A/N 492529.	0	0	0	0	0	0
1 st Revision: Change permit condition to increase throughput on two powder spray booths, A/N 473461 and 473462	0	0	0	5	0	0
Revision 0 (administrative): change of operator from APW (ID# 110175) to AMF Anaheim (ID# 149235) issued 9/4/07 (Revision 0).	0	0	0	5	0	0
Maximum Daily Limit	30	30	40	30	60	220

RECOMMENDATION

The proposed project is expected to comply with all applicable District Rules and Regulations. Since the proposed project is considered as a “minor permit revision”, it is exempt from the public participation requirements under Rule 3006 (b). A proposed permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not raise any objections within the review period, a revised Title V permit will be issued to this facility.